



Utah Watershed Review

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Utah's Nonpoint-Source Water-Quality Newsletter

June 2000

WOW!

Wonderful Outdoor World Brings Great Outdoors to Inner City Kids

Wonderful Outdoor World (WOW), a nationally sponsored locally led program to bring camping and nature to disadvantaged inner city children, is coming to Utah. "I think we've already decided it isn't a matter of if we bring this program to Utah but how we do it," said Susan Alden, US Forest Service, Salt Lake City. The steering committee is currently looking into the possibility of kicking off Utah's WOW program in April 2001 with a first-ever family WOW during Earth Day celebrations at Gardner Village. WOW brings a camping experience to the inner city and to the children who aren't getting out into the country or the forests. "A number of youth today are simply not being introduced to the great outdoors," said Derrick Crandall, president, Recreation Roundtable, Washington, D.C. "It's time for all of us, private and public alike, to work together to help young people understand their options. One of the problems, especially with inner city kids is that they aren't as exposed to nature as early in their development or as often today and previous generations were. "It used to be that kids couldn't wait after school to get outside and play. Today they play video games inside or they hang out on the street corner or alley way," said Kym Murphey, president, environmental programs, Walt Disney Corporation. Through the support of Disney, Coleman and other national and local organizations, the WOW program brings an overnight camping experience right into the city.

Local organizers secure a neighborhood park, recreation center playground, church playground or other similar outside location. The idea of bringing the great outdoors to the kids is to make

the experience less threatening by giving them "a new experience in a very familiar setting." Then a temporary "tent city" is erected. The campers show up and are given a new sleeping bag to keep. They are taught camping skills, safety and first aid and how the fish. The environmental part of the program can include education about local plants and animals, river and stream health, and pollution prevention. WOW is designed to be a one-time program. "We want to spark kids to get involved with on-going local programs," said Crandall. "It's fun to see the light go on as these kids get in touch with nature for the first time." In Utah, grassroots organizations that focus on children and the environment, such as the Utah Society for Environmental Education and the Utah Federation for Youth sit on the WOW

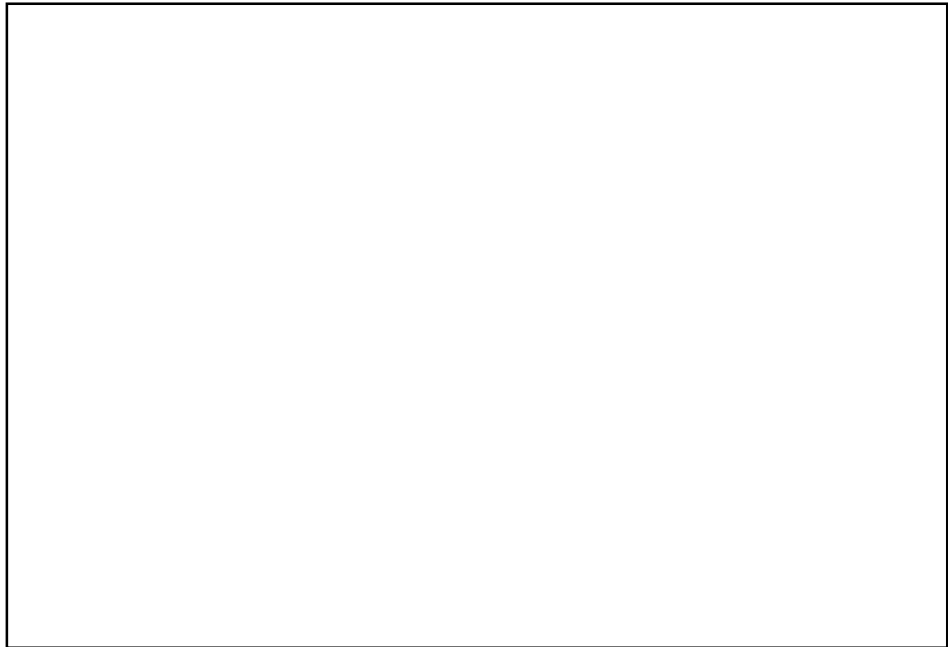
steering committee. Other early partners include the Bonneville Resource Conservation and Development Council, Salt Lake City Parks and Recreation, West Valley City Parks and Recreation, Tree Utah, Snowbird Ski Resort, and the Utah Department of Agriculture and Food. To date WOW programs have been started in Los Angeles, California, Phoenix and Tucson, Arizona, Denver Colorado, and Washington, D.C. Each local WOW steering committee commits to hosting about 10 camping trips a year. With each outing costing local hosts between \$2,000 and \$4,000 a piece, public and private partnerships will be critical to the program's success in Utah, organizers say. For more information, contact Susan Alden, US Forest Service, 801 524-3964.

Contents

Natural Resources Week.....	page 2
Farm Field Days.....	page 4
PeaceTrees 2000...	page 5
Utah NPS Conference Preview.....	page 7
Welby Aagard.....	page 8

Governor Floats Urban River

Leavitt Kicks off Natural Resources Conservation Week



Parkview Elementary School Students wait along the banks of the Jordan River for Governor Leavitt to arrive by boat.

With 200 excited, but patient elementary school students waiting at the Bend in the River Urban Tree House and Green Space along the Jordan River in Salt Lake City, Utah Governor Michael O. Leavitt arrived by motor-driven canoe to proclaim Natural Resources Conservation Week in early May.

The students in attendance from Parkview Elementary School had spent many hours over many months restoring the area to be an outdoor classroom.

The site at 1030 W. Freemont (1100 S.) was alive with anticipation as the Governor arrived.

"This is a week we can all celebrate places like the Jordan River Parkway," Leavitt said. "The goal here is to preserve and conserve. The heritage we receive becomes our legacy."



The Governor arrived at the event in style as part of a floating caravan.

teacher who worked on the restoration project.

Parkview Principal Janine Smith agreed. "They care about this area."

Many students said that the area wasn't very good looking or useful before the project started. They

talked with pride about their urban oasis.

Leavitt seemed very happy with the effort.

"You've done a good job," he told the students.



The Governor shakes hands with some of the 200 students on hand to see him.

Utah Watershed Review

EditorJack Wilbur

Editorial Review

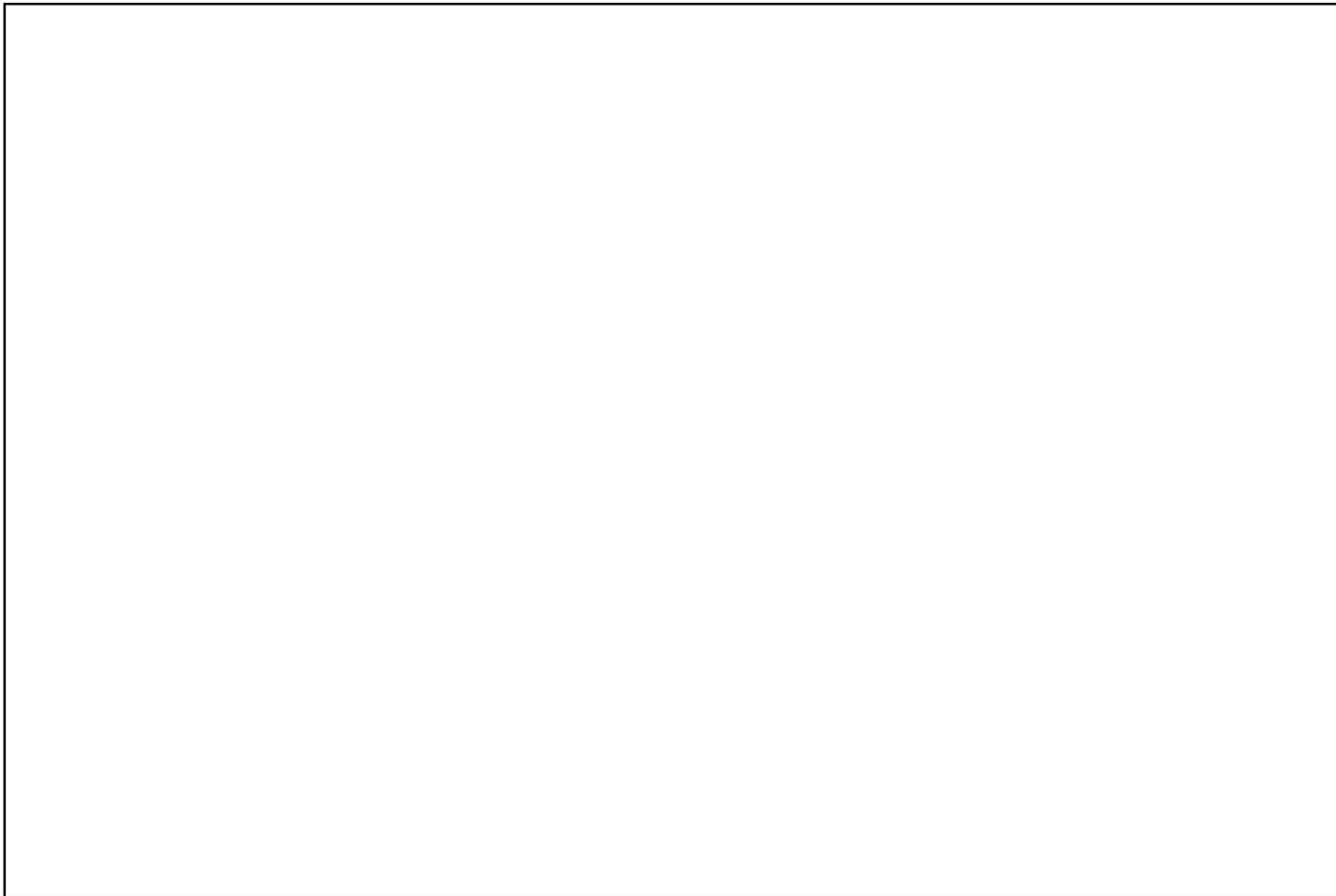
Cary G. Peterson, Utah Commissioner of Agriculture and Food,
Don A. Ostler, director, Utah Division of Water Quality,
George Hopkin, Utah Department of Agriculture and Food,
Mike Reichert, Utah Division of Water Quality
Roy Gunnell, Utah Division of Water Quality

If you would like to request an additional copy, make a comment or suggest a story or watershed focus idea, please call **Jack Wilbur** (801) 538-7098. Or write:

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Conservation Farming in Utah

Sunderlands Manage, Crops, Livestock and the Environment in Sanpete County



The Sunderland dairy farm is in a picturesque setting. Sunderland's manure management program is designed to keep the river as clean as the valley through which it travels.

Nestled in the foothills of SanPete County near the town of Chester is the 1,400 plus acre Sunderland Farm.

Scott Sunderland manages the farm that includes 50,000 turkeys, 600 milking cows; several hundred head of dry and replacement coows; and 1,400 acres of alfalfa, barley, wheat, sorghum and other grains. Sunderland has to grow a variety of grains because he doesn't have enough late summer water to just grow hay all season.

On the other hand, has has plenty of manure to last.

"We've been working on manure management since we bought this farm 20 years ago," Sunderland said.

Sunderland scrapes the manure from the corals into lagoons that sit just west and down grade slightly from the animals. A manure separator separates the dry manure from the liquid. The liquid is applied by using "big guns" as part of a dual package

sprinkling system. Sunderland uses drop sprinklers from the system to apply fresh water during the growing season. The guns apply manure during the off season.

Winter application of manure to cropland is an important part of the operations of many livestock producers.

"If they take that away from us I don't know what a lot of us would do," Sunderland insisted.

But he realizes that over application of manure and other fertilizers can result in surface water or ground water pollution. So Sunderland started working with his local Natural Resource Conservation Service technician to develop one of the first comprehensive nutrient management plans in the area.

"When I had my soil tested I found that some of my fields had a lot higher phosphorus content than others did. So now I adjust my application rates.

As a member of his local soil

conservation district, Sunderland also knows the importance of setting a good example for other farmers in the area and spreading the word about good conservation practices.

While Sunderland has spent a lot of time and effort improving his manure management system over the years, he still has problems from time to time. Recently he had to pull his mechanical separator and return it to the manufacturer because long straw was getting caught and clogging the machine. He has purchased a different model and will see how it goes with this one. His big gun sprinklers also get clogged sometimes with manure.

However, generally, Sunderland is successful in his manure management efforts. It's work that makes him feel good.

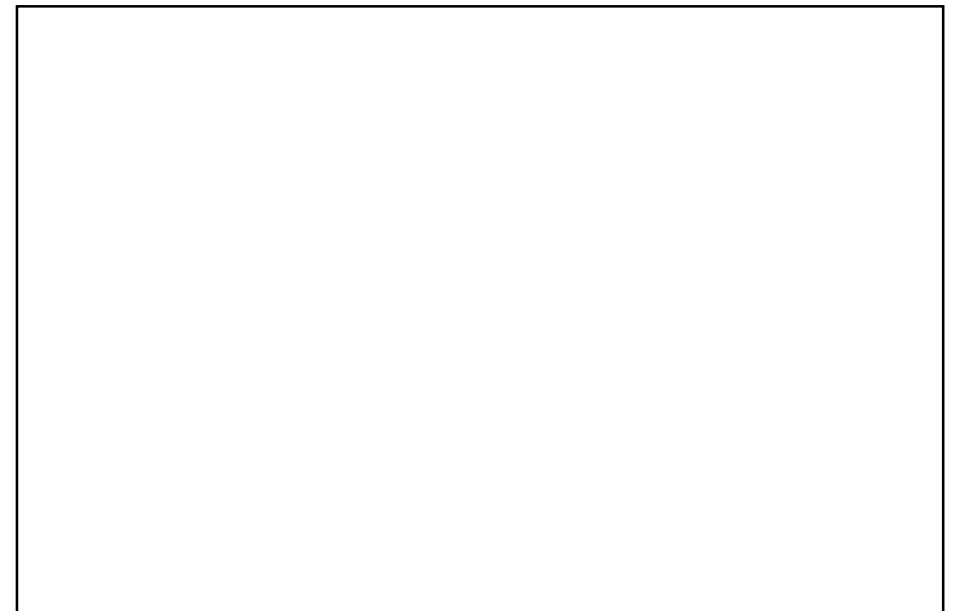
Next Issue:

Welby Aagard, Summit County

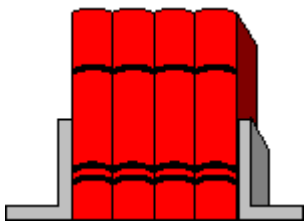
We want your feedback

In order to continue this feature on conservation farmers and their practices, we need your ideas. Please contact us with any suggestions you have about who to focus on or how to improve this feature.

Contact Jack Wilbur (801) 538-7098. Email Jack at the following address: jwilbur@state.ut.us



With the river near by, Scott Sunderland must make certain no manure leaves the farm.



Learning About Our Water

Farm Field Days Provide Fun, Education



A local bee keeper tells 5th graders about the important role bee play in growing fruit and other foods during the Washington County farm field day.

Spring means farm field days around the state. Elementary school children from counties and school districts statewide gather at a host farm in their area to learn about where food comes from, how farm animals are used for more than just food, and how farmers and ranchers work to clean up the environment.

In Utah County the event was hosted again this year at the Rulon Gammon Dairy farm. Morgan County's event touched every 5th grader in the county. Hosted by Fred Thurston in the hills west of Morgan, the event focuses more than most on the environmental stewardship side of farming and ranching. In Salt Lake County the Bateman family hosting the event for the last time. After nearly 130 years in the same location, the Batemans are moving their family dairy farm to Juab County. Urban pressures in Salt Lake County have made it impossible to continue an operation of their size in West Jordan. The farm field day concept is designed to give urban kids a chance to connect with the farm and nature.

The same urban pressures are facing Washington County, where Ralph Staheli, as one of the last farmers in the St. George area,

continues to host a farm field day. In Washington City in an area known as Washington Fields, Staheli farms a few hundred acres of valuable ground. While this farm is only a few

miles from downtown St. George, it is a world away for some of the children from the increasingly urban city.

During the Washington County Farm Field Day at the Staheli Farm, about 1,400 5th grade students from St. George and surrounding communities took the short bus trip to the farm to learn about soil and water, and the food chain. One of the classes making the trip was Ron Whitmer's 5th grade class from East Elementary in St. George. According to Whitmer, his school is as urban as some inner city schools in much larger communities. "We have by far the largest minority population of any school in the district," said Whitmer.

"It's [this farm field day] is a good promotion for agriculture," Whitmer said. "This is the best way to learn." And Whitmer's students, like many young people from larger urban areas, know little about farming and from where their food comes.

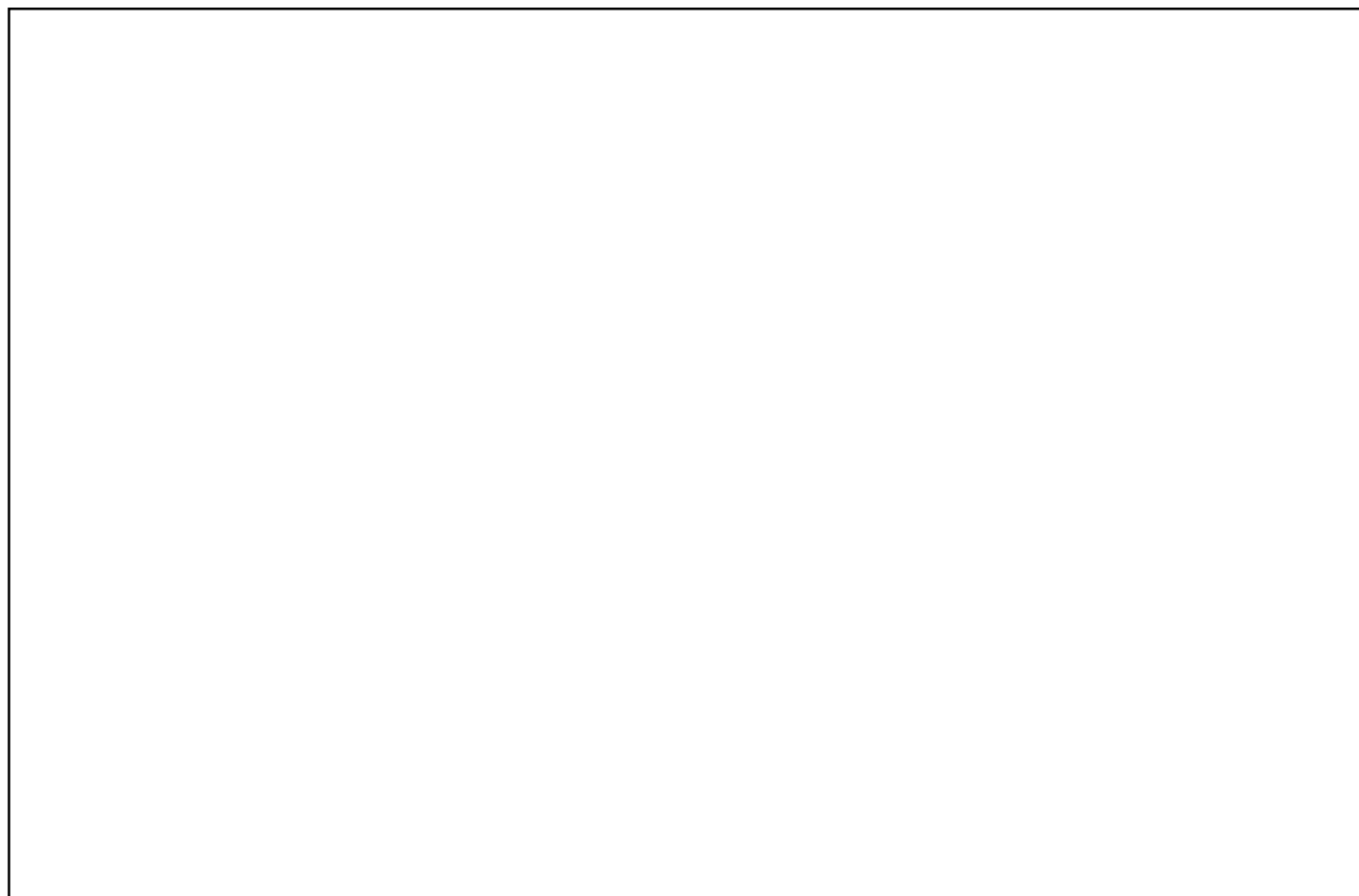
"One of the best things about this experience is the connection it gives

these kids to the land," said Vernon Parent, Washington County Extension.

The various stations and presentations that the young people see are designed to make those connections. The field day has every type of farm animal from cows to honey bees. One of the major attractions was the hog trailer sponsored by the Utah Pork Producers Association. The fancy travel trailer is filled with photos and written explanations about hogs and the byproduct that come from pork. The children are always fascinated by how many products used in daily life use hog byproducts.

A local beekeeper was also at the field day demonstrating the importance of honey bees in agricultural production.

Another interesting aspect of the Washington County day was the small collection of antique farm equipment. Showing the past of farming is another way to help young people make the connection between their food and the farm, according to Parent.



St. George students touch cows as part of their farm field day experience. More than 1,400 students spent time at the Staheli farm.

Community-based



Watershed Activities

PeaceTrees 2000:

Giving Teens Training in Leadership/ Environmental Stewardship



Many of the 1999 PeaceTrees Salt Lake City Participants stayed for one last photo at Camp Williams where the participants were housed during the two-week camp.

By Karen Johnson
PeaceTrees Peer Counselor

Since we all live downstream, water is, and has been for thousands of years, the source of connection with life in all aspects—physical, mental, emotional, and spiritual. Environmentalists in Salt Lake City have begun the immense process of restoring the Jordan River from years of destruction due to construction, pollution, erosion, litter, and neglect of wildlife. They believe, as Chief Seattle wrote, that nature is sacred and humans are stewards of the earth: “Whatever befalls the earth befalls the sons of the earth. Mandid not weave the web of life; he is merely a strand in it. Whatever he does to the web, he does to himself...”

The idea of a camp, called PeaceTrees, focuses on the process

of healing the earth through healing ourselves by involving teenagers in restoring a natural park along the Jordan River at 1600 South 1200 West in Salt Lake City. This allows young people to feel the power of the earth as they work hand-in-hand along the river. In turn, that power transcends inside themselves and others, creating a healthy atmosphere to break down barriers of mistrust and differences through communication and conflict resolution. A participant in 1999, Nhu Lieu Tran, said how PeaceTrees has helped her: “When I have a sadness, and I can be with nature and trees, it helps me feel better; it helps me solve problems. Whenever I see the river it helps me forget everything and helps me look at the future.”

From the beginning of PeaceTrees, SLC, the Jordan River

has symbolized what the world has been going through in both social and environmental aspects.

First of all, many people hold the notion that the river is chemically unbalanced and unhealthy because of its color. Not true. PeaceTrees participants tested the water and proved it to be healthy, and brown because of the soil (due to erosion and the natural effects of water carrying it downstream). Although the Jordan has been straightened out manually from its natural bends, it has survived. Secondly, the social demeanor of a diverse community has transformed from ignorance and isolation to acceptance and unity because of the river. In 1998, PeaceTrees and the Utah National Guard moved a bridge at the natural

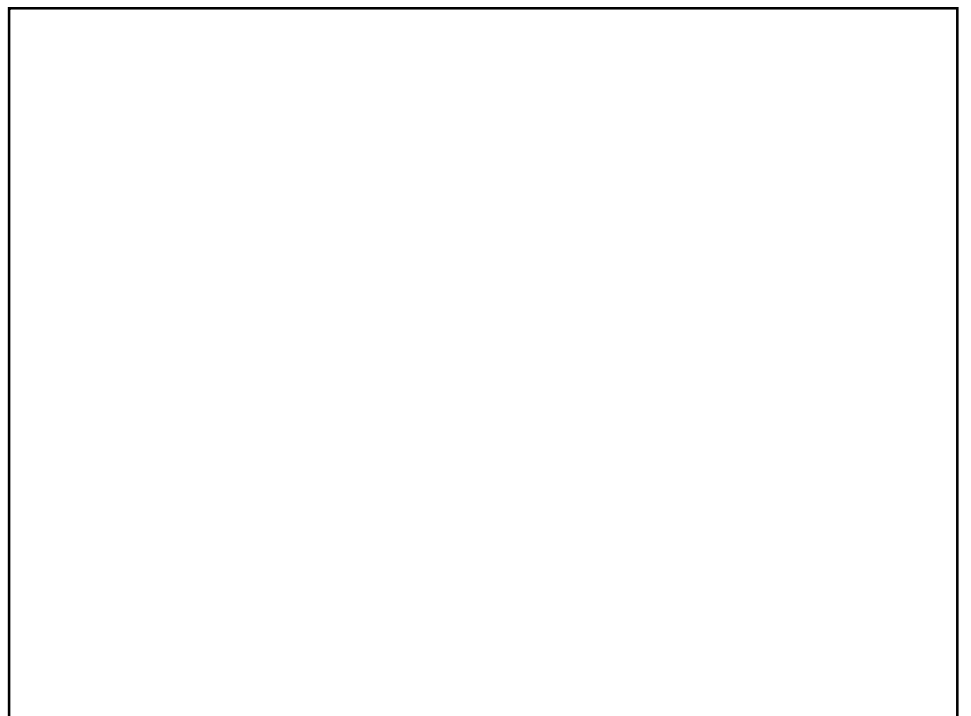
park. This bridge was previously in an ineffectual location by a neighboring park and was moved to connect the community that had been divided by the river.

This year, PeaceTrees participants will focus on maintaining the health of the park and will be holding a hazardous waste disposal drive. They will also be planting seedling trees in Millcreek Canyon and working to clean up the area of Decker Lake in West Valley. The camp is from July 20-31. For further information on contributing to the project or being a participant, contact Kari Cutler:

Tel: 468-0699 or 1-887-373-INFO

Email: www.ufyi.org/pt-index or kcutler@utah-inter.net

Fax: (801) 537-7827



Adam Weiss, PeaceTrees peer counselor makes a presentation during a weekend counselor training in May 2000. This is the first year that PeaceTrees Salt Lake City will use former participants as counselors.

“Water Quality from the City to the Farm”

Agenda

Monday, July 17

Meetings for:

- Utah Association of Conservation Districts (UACD)
- Utah Water Quality (WQ) Board
- Utah Soil Conservation Commission (SCC)
- Combined WQ Board & SCC

Tuesday, July 18

Breakfast Buffet & Registration 7:00 a.m. — 8:30 a.m.

8:30 a.m. — 10:00 a.m. General Session I — “The Big Picture”

- NPS Conference Committee Chairman — Roy Gunnell, *environmental scientist, Division of Water Quality*
- Welcome — Fee Busby, *dean of the college of natural resources, Utah State University*
- Video — “Managing Manure: Animal Feeding Operation Issues in Utah” Jack Wilbur
- Keynote — Rebecca Hanmer, *acting regional administrator, Region 8, USDA EPA*
- “The Clean Water Act in a Changing World”
- Perspectives on Stormwater Phase II Regulations and the Unified Concentrated Animal Feeding Operation Strategy*
- Keynote — Mike Allred, *TMDL coordinator, Utah Division of Water Quality*
- “Little Bear River Intensive Monitoring Study Overview”

Break 10:00 a.m.—10:30 a.m.

10:30 a. m. – 12:00 noon Concurrent Session I

Track A: Stormwater (Moderator: Roy Gunnell)

- Decker Lake: A Comprehensive Approach to Urban Water Quality
- Karen K. Nichols, P.E., *Stantech Consulting*
- Low Impact Development Design Standards (related to stormwater)
- Gordon Younker, *executive vice president, Utah Assoc. of Conservation Districts*

Track B: Animal Feeding Operations (Moderator: Virginia Sligting)

- Composting Inside High-Rise Layer Houses
- Dean Miner, *Utah county director of agriculture, Utah State University Extension*
- Dr. Rich Koenig, *soils specialist, Utah State University Extension*
- Utah AFO/CAFO Strategy — Inventory and Assessment
- Mark Petersen, *director of water quality programs, Utah Farm Bureau*
- Ray Loveless, *zone coordinator, Utah Association of Conservation Districts*

Track C: Other Watershed Efforts (Moderator: W. D. Robinson)

- Using the State Revolving Loan Fund for NPS Projects
- Walt Baker, *manager construction assistance section, Utah Division of Water Quality*
- Beaver River Watershed Day (volunteer watershed restoration/outreach effort)
- Mark R. Nelson, *Beaver County extension agent, Utah State University Extension*

Buffet Lunch 12:00 noon – 1:00 p.m.

1:00 p.m. – 2:30 p.m. General Session II — “AFO/CAFO, A Panel Discussion “

(Moderator Fee Busby)

- 1:00 — 1:15 p.m. Federal Perspective Carl Lucero, *US EPA Region VIII, Denver, CO*
- 1:15 — 1:30 p.m. Utah Strategy Don Ostler, *Utah Division of Water Quality*
- 1:30 — 1:50 p.m. CNMP Overview Kerry Goodrich, *Natural Resources Conservation Service*
- 1:50 — 2:10 p.m. Real World Example Dave Roberts, *dairy farmer, Beaver, UT*
- 2:10 — 2:30 p.m. Q&A

Break 2:30 p.m. – 3:00 p.m.

3:00 p.m. – 4:30 p.m. Concurrent Session II

Track A: Stormwater (Moderator: Craig Miller)

- Best Management Practices for Stormwater Runoff - Phase II NPDES Regulations
- Stephen Weber, *maintenance division manager, City of Orem Dept. Public Works*
- Water Quality Data Report for Salt Lake County
- Sarah A. McIlroy, *Stantech Consulting*

Track B: Animal Feeding Operations (Moderator: George Hopkin)

- Moo-ving the Cows Away from the River—A case study at Hopkin Ranch in Rich County
- Stuart Hopkin, *rancher, Woodruff, UT*
- Tim Julander, *range management specialist, Natural Resources Conservation Service*

Phosphorus Runoff From Irrigated Pastures

Sheldon Nelson, *professor of Soil Science, Brigham Young University*
Nels Hansen, *M.S. Graduate Student, BYU*

Track C: Other Watershed Efforts (Moderator: Earl Jackson)

On-Site Wastewater Treatment Data Base Development

Darwin L. Sorenson, *associate professor*; Jordeane Dent, *student*; Ronald C. Sims,
professor — Utah Water Research Laboratory, Utah State University

The Otter Creek Watershed Improvement Project: Results from the NPS Monitoring Workgroup

Dale Chess, *hydrologist, Utah Division of Water Quality*;

Bill Bradwisch, *aquatic habitat coordinator, Utah Division of Wildlife Resources*

Mark Petersen, *director of water quality programs, Utah Farm Bureau*

Wednesday- July 19

Breakfast Buffet & Registration 7:00 a.m. — 8:30 a.m.

8:30 a.m. Tours Load Busses for:

Tour 1 — Two hour Float Trip on the Bear River; lunch; afternoon at USU water lab

**Tour 2 — Morning at USU Water Lab; lunch; afternoon at experimental farm or
other campus activity**

5:30 p.m. Barbeque – Willow Park & Zoo (500 West 700 South, Logan) - Zoo open until 8:00 p.m.

Thursday - July 20

Breakfast Buffet 7:00 a.m. — 8:30 a.m.

8:30 a.m. – 10:00 a.m. Concurrent Session III

Track A: Stormwater (Moderator: Shelly Quick)

Salt Lake County's Stormwater Quality Public Information/Education Program

Terry G. Way, *P.E., program manager*; Steve Burgon, *hydrologic technician*
Salt Lake County Public Works Department, Engineering Division

Stormwater Phase II Permit Requirements for Small Municipalities

Harry Campbell, *engineer, Utah Division of Water Quality*

Track B: Animal Feeding Operations (Moderator: George Burbidge)

Using Nitrogen Stable Isotopes to Assess Linkages Between Land Use Activities and Water Quality in Western U.S. Watersheds

Chris Luecke, *USU Dept. of Fisheries and Wildlife*; Brett Thompson, *Student*; Nancy Mesner, *USU Extension*

The Utah Manure Application Risk Index (UMARI)

Kerry Goodrich, *conservation agronomist, USDA NRCS*

Track C: Other Watershed Efforts (Moderator: Penny Trinca)

Source Water Protection Assessment Tools Development

Darwin L. Sorensen, *resource associate professor*; **R. Ryan Dupont**, *head, division of environmental engineering*; **Gilberto E. Urroz**, *associate professor*; **David Tarboton**, *associate professor*; **Ronald C. Sims**, *professor*; **David K. Stevens**, *professor*; **Marius W. Kemblowski**, *professor, Utah Water Research Laboratory College of Engineering, USU*

James P. Dobrowolski, *acting director*; R. Douglas Ramsey, *associate professor*
Unit, College of Natural Resources, USU

Watershed Science

Donald T. Jensen, *state climatologist, College of Agriculture, USU*

Changes in Water Quality and Functioning River Systems in Utah: A Biologist's View

Kent Summers, *biologist, Utah Division of Wildlife Resources*

Break 10:00 a.m. – 10:30 a.m.

10:30 a.m. – 12:00 noon General Session III — “Stormwater, A Panel Discussion”

Video – Stormwater issues under Phase II—Jack Wilbur

10:30 a.m. – 10:45 a.m. Phase II Overview Harry Campbell, Environmental Engineer, DEQ

10:45 a.m. – 11:00 a.m. Best Management Practices Steve Weber, Orem Public Works

11:00 a.m. – 11:15 a.m. Public Information Program Terry Way, Salt Lake County Public Works

11:15 a.m. – 11:30 a.m. Construction Site Erosion Gordon Fuller, Draper City (Invited)

Questions & Answers

Lunch 12:00 noon – 1:00 p.m. Speakers and Awards

Adjourn

"Water Quality from the City to the Farm"

2000 Utah NPS Conference

Registration Form

(Please print)
Name _____ Title _____
Organization _____
Companion's Name _____
Address _____
City _____ State _____ Zip _____
Telephone _____ FAX _____ E-mail _____
Special physical or dietary needs _____

Conference Only	\$100.00	No. _____	@ \$100.00 _____
Barbeque Only	\$ 20.00	No. _____	@ \$20.00 _____
River Tour 1	\$ 25.00	No. _____	@ \$25.00 _____
USU Water Lab etc. Tour 2	\$ 15.00	No. _____	@ \$00.00 _____
Late Fee for all registrations postmarked after July 10, 2000			@ \$10.00 _____

Total \$ _____

Make checks payable to: **Utah Association of Conservation Districts (UACD)**

Mail Registration sheet to:
Virginia Sligting
NPS Conference
C/O Utah Department of Agriculture & Food
P. O. Box 146500, Salt Lake City, UT 84114-6500

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